

Book review: Niedringhaus, R., Stöckmann, M. & Wachmann, E. (2025). *Die Wanzen Deutschlands II: Bestimmungsschlüssel für alle Arten*. [Heteroptera of Germany II: Identification key to all species.] (in German). WABV, Scheeßel, 491 S.

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German fauna of Heteroptera is quite large with ca. 900 species and very diverse ecologically, including many potential bioindicators and species of economic importance. However, until recently the study of German Heteroptera was hampered by a lack of up-to-date identification manuals, since the last such work that covered all the country's fauna was completed by Eduard Wagner in 1967 and in the meantime became seriously outdated. Now, with the publication by Niedringhaus et al., there is finally a solid foundation for work of zoologists, ecologists, environmental consultants, naturalists, photographers, educators and all others interested in Heteroptera taxonomy and faunistics.

The new volume — building up on Niedringhaus et al. (2020) which contained a general introduction to Heteroptera and their families as well as an identification key down to the genus level — now makes it possible to identify the true bugs of Germany down to the species level. Here, the authors not only provide dichotomous keys and (mostly original) drawings illustrating diagnostic characters — one of the strong suits of the book is that it includes photographs of almost every German species of Heteroptera, either living specimens or collection specimens in the case of rare species (and even of many nymphs, which are summarized in an appendix at the end of the volume). This, in itself, is already a big help for species identification.

Every species' profile is completed with concise summaries on ecology, distribution maps and phenological data, making the volume an encyclopaedia on true bugs. The book is of such considerable size that this could be a hindrance in the field — but it allows the authors to keep the keys and pictures of several related species on the same page, which facilitates comparison very much.

The most obvious weakness of the work by Niedringhaus et al. is that it is written in German only, although many readers outside of Germany might be interested in it. However, in the times when machine translation tools are readily available for mobile phones this might not be a very big hindrance. Furthermore, the manual of such scope will inevitably be worthy of minor improvements in diagnostic characters or keys here and there. Nevertheless, the work by Niedringhaus et al. raises research on true bugs of Germany to a new level, offers great help for experts and lowers the entry barrier for beginners — that gives hope that Heteroptera will become more popular objects of study in Germany and elsewhere in Europe in the future. And — last but not least — this book is a perfect memorial to Ekkehard Wachmann, who passed in September 2023 when the new volume was still in preparation, and whose lifelong commitment to the true bugs of Germany advanced the study of these insects like no other.